

U.S.S.N. 10/099,830

Filed: March 13, 2003

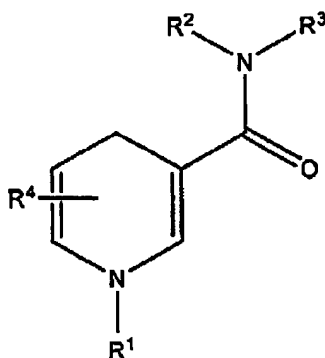
AMENDMENT AND RESPONSE TO OFFICE ACTION

Amendment

In the Claims

Claims 1-33 (Canceled).

34. (previously presented) A therapeutic system comprising a prodrug which is converted to a substantially cytotoxic drug by the action of NQO2 and a compound of formula I



wherein R1 is selected from the group consisting of substituted alkyl, including substitution by CONH<sub>2</sub>, OH, halogen, CN, and COOH; aryl; substituted aryl; CONR<sub>a</sub>R<sub>b</sub>, where R<sub>a</sub> and R<sub>b</sub> are independently H, alkyl, or substituted alkyl, and R<sup>2</sup> and R<sup>3</sup> are independently H, alkyl, or substituted alkyl and R<sup>4</sup> is any of H, alkyl, substituted alkyl, halogen, CN, COOH, CONH<sub>2</sub>, or OH, wherein the compound can pass reducing equivalents to NQO2, in a form for administration to a patient in need thereof, wherein the prodrug is CB 1954.

Claims 35-40 (Canceled)

41. (Previously Presented) The system of claim 34, wherein the compound is 1-(carboxamidomethyl)-dihydronicotinamide.

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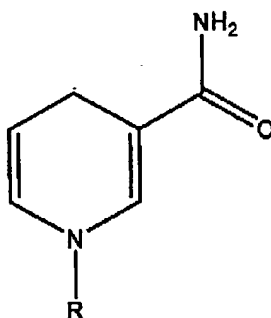
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42. (previously presented) The system of claim 34, wherein the compound has formula

II



wherein R is a substituted alkyl, comprising one or more groups selected from the group consisting of CONH<sub>2</sub>, OH, halogen, CN, and COOH.

43. (Previously Presented) The system of claim 34, wherein the alkyl group is a C1 to C6 alkyl.

44. (previously presented) The system of claim 42, wherein R is selected from the group consisting of -CH<sub>2</sub>CONH<sub>2</sub>, -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub><sup>-</sup>, -CH<sub>2</sub>CH<sub>2</sub>OH, -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH, and -CH<sub>2</sub>CH<sub>2</sub>COOH.

45-47. (Canceled)

48. (new) The therapeutic system of claim 34 wherein the system is effective at killing tumor cells in the treatment of cancer.